

## EVOSTC ANNUAL PROJECT REPORT

Recipients of funds from the *Exxon Valdez* Oil Spill Trustee Council must submit an annual project report in the following format by **Sept. 1 of each fiscal year** for which project funding is received (with the exception of the final funding year in which a final report must be submitted). **Please help ensure that continued support for your project will not be delayed by submitting your report by Sept. 1.** Timely receipt of your report allows more time for court notice and transfer, report review and timely release of the following year's funds.

Satisfactory review of the annual report is necessary for continuation of multi-year projects. Failure to submit an annual report by **Sept. 1** of each year, or unsatisfactory review of an annual report, will result in withholding of additional project funds and may result in cancellation of the project or denial of funding for future projects. **PLEASE NOTE:** Significant changes in a project's objectives, methods, schedule, or budget require submittal of a new proposal that will be subject to the standard process of proposal submittal, technical review, and Trustee Council approval.

**Project Number:** 10100132-C

**Project Title:** PWS Herring Survey: Pacific Herring Energetic Recruitment Factors

**PI Name:** Dr. Tom Kline

**Time period covered:** F/Y2010

**Date of Report:** 1 September 2010

**Report prepared by:** Dr. Tom Kline

**Project website:** In development by lead project

**Work Performed:** Summarize work performed during the reporting period, including any results available to date and their relationship to the original project objectives. Explain deviations from the original project objectives, procedural or statistical methods, study area or schedule. Also describe any known problems or unusual developments, and whether and how they have been or can be overcome. Include any other significant information pertinent to the project.

- Collected herring samples on two cruises (November 2009 and March 2010)
  - Herring samples from cruises sent to collaborators
  - Collected herring samples from Cordova harbor
  - Samples from two cruises and harbor prepared for analysis
  - Prepared samples sent to UAF Stable Isotope Facility (currently awaiting data from these samples)
  - Prepared samples sent to Dr. Paul Hershberger
  - Received samples from March blitz cruise (samples currently undergoing preparation for analysis)
  - Completed previous project (data analysis and final report writing; final report was accepted)
- Maybe the most significant observation made thus far in 2010 was the external parasite load on ~ 1/3 of the herring observed in Cordova harbor during May. These parasitic copepods were identified by Dr. Paul Hershberger as *Caligus clemensi* and *Lepeopththerius* sp. (most likely *L. cuneifer*). These parasites may affect herring by draining their energy as well being a vector for diseases. Additionally, numerous parasitic copepods were observed on young of the year herring in underwater photos taken by Dr. Kline last week.

**Future Work:** Summarize work to be performed during the upcoming year, if different from the original proposal. Describe any proposed changes in objectives, procedural or statistical methods, study area or schedule. **NOTE:** Significant changes in a project's objectives, methods, schedule or budget

*require submittal of a new proposal subject to the standard process of proposal submittal, technical review and Trustee Council approval.*

- No difference other than addition of harbor samples should herring appear in Cordova harbor in 2011

**Coordination/Collaboration:** Describe efforts undertaken during the reporting period to achieve the coordination and collaboration provisions of the proposal, if applicable.

- Samples collected for and sent to collaborators during cruises and from Cordova harbor
- Flyer produced in collaboration with education department

**Community Involvement/TEK & Resource Management Applications:** Describe efforts undertaken during the reporting period to achieve the community involvement/TEK and resource management application provisions of the proposal, if applicable.

- Sent observations of herring in Cordova harbor via e-mail to community representatives and other researchers on herring e-mail list (provided by Dr. Scott Pegau)
- March blitz cruise done in collaboration with local fishers

**Information Transfer:** List (a) publications produced during the reporting period, (b) conference and workshop presentations and attendance during the reporting period, and (c) data and/or information products developed during the reporting period. *NOTE: Lack of compliance with the Trustee Council's data policy and/or the project's data management plan will result in withholding of additional project funds, cancellation of the project, or denial of funding for future projects.*

(a): A manuscript titled "Stable carbon and nitrogen isotope variation in the northern lampfish and *Neocalanus*, marine survival rates of pink salmon, and mesoscale eddies in the Gulf of Alaska" has been accepted provisionally by the journal *Progress in Oceanography*. This paper contains some EVOS-TC funded results, which is acknowledged.

(b): Presented a paper titled "Stable isotope analysis based forecasts as an aid for fisheries management" at the Seventh International Conference on Applications of stable isotope Techniques to Ecological Studies that was held in Fairbanks in August 2010; This paper will be presented again this fall in Cordova, gave a public lecture on herring research at the PWSSC, participated in P.I. meeting, attended annual Alaska marine research meeting

(c): Raw data files posted on Network Attached Storage at the PWSSC; Project flyer released; article written for PWSSC's newsletter, "The Breakwater",

**Budget:** Explain any differences and/or problems between actual and budgeted expenditures, including any substantial changes in the allocation of funds among line items on the budget form. Also provide any new information regarding matching funds or funds from non-EVOS sources for the project. *NOTE: Any request for an increased or supplemental budget must be submitted as a new proposal that will be subject to the standard process of proposal submittal, technical review, and Trustee Council approval.*

None

We can accept your annual report as a digital file (Microsoft Word or WordPerfect), with all figures and tables embedded. Acrobat Portable Document Format (PDF) files (version 4.x or later) are also acceptable; please do not lock PDF files or include digital signatures.

Please submit reports electronically in [ProjectView](#) or by email to [catherine.boerner@alaska.gov](mailto:catherine.boerner@alaska.gov). Also, please be sure to post your annual report on your own website, if you have one.



*We appreciate your prompt submission of your annual report  
and thank you for your participation.*